

PROJECT INFORMATION

Project Title	Create a Restoration Plan for Cahoon Meadow, Sequoia National Park
Brief Description	This project will produce a plan and NEPA/CEQA compliance to restore wetlands in the 17-acre Cahoon Meadow, which contains severe erosion gullies as a result of historic grazing. The meadow is located in designated wilderness, and alternatives will include both mechanized and non-mechanized treatments. In addition to providing a plan to improve water storage, wildlife habitat, and watershed health, this project will serve as a prototype for improving conditions of degraded wilderness meadows that have legacy impacts of past grazing.
Total Requested Amount	74,500.00
Other Fund Proposed	79,560.00
Total Project Cost	154,060.00
Project Category	Pre-Project Due Diligence
Project Area/Size	17
Project Area Type	Acres
Have you submitted to SNC this fiscal year?	No
Is this application related to other SNC funding?	No

Project Results
CEQA/NEPA Compliance
Environmental site assessment (Phase I/II)

Project Purpose	Project Purpose Percent
Habitat	
Natural Resource	
Water Quality	

County
Tulare

--

Sub Region
South

PROJECT CONTACT INFORMATION

Name	Ms. Athena Demetry,
Title	Ecologist
Organization	Sequoia and Kings Canyon National Parks
Primary Address	Sequoia and Kings Canyon National Park, 47050 Generals Highway, , Three Rivers, CA, 93271
Primary Phone/Fax	559-565-4479 Ext.
Primary Email	athena_demetry@nps.gov

PROJECT LOCATION INFORMATION

Project Location

Address:	Mineral King Road, , , Three Rivers, CA, 93271 United States
Water Agency:	Regional Water Quality Control Board, Central Valley Region
Latitude:	36.385636
Longitude:	-118.70371
Congressional District:	n/a
Senate:	n/a
Assembly:	n/a
Within City Limits:	No
City Name:	

ADDITIONAL INFORMATION

Grant Application Type

Grant Application Type: Category Two Pre-Project Activities
Grant Application Type: Category Two Pre-Project Activities

PROJECT OTHER CONTACTS INFORMATION

Other Grant Project Contacts

Name:	Ms. Athena Demetry,
Project Role:	Day-to-Day Responsibility
Phone:	5595654479
Phone Ext:	
E-mail:	athena_demetry@nps.gov

UPLOADS

The following pages contain the following uploads provided by the applicant:

Upload Name
Completed Application Checklist
Table of Contents
Full Application Form
Authorization to Apply or Resolution
Narrative Descriptions
Detailed Budget Form
Letters of Support
Project Location Map
Topographic Map
Photos of the Project Site
Parcel Map Showing County Assessors Parcel Number

To preserve the integrity of the uploaded document, headers, footers and page numbers have not been added by the system.

Appendix B1

Full Application Checklist

Project Name: Create a Restoration Plan for Cahoon Meadow, Sequoia National Park

Applicant: Sequoia and Kings Canyon National Parks

Please mark each box: check if item is included in the application; mark "N/A" if not applicable to the project. "N/A" identifications must be explained in the application. Please consult with SNC staff prior to submission if you have any questions about the applicability to your project of any items on the checklist. All applications must include a CD including an electronic file of each checklist item, if applicable. The naming convention for each electronic file is listed after each item on the checklist. (Electronic File Name = EFN: "naming convention". file extension choices)

Submission requirements for all Category One and Category Two Grant Applications

1. ☒ Completed Application Checklist (EFN: *Checklist.doc, .docx, .rtf, or .pdf*)
2. ☒ Table of Contents (EFN: *TOC.doc, .docx, .rtf, or .pdf*)
3. ☒ Full Application Project Information Form (EFN: *SIform.doc, .docx, .rtf, or .pdf*)
4. ☒ Authorization to Apply or Resolution (EFN: *authorization.doc, .docx, .rtf, or .pdf*)
5. ☒ Narrative Descriptions - Submit a single document that includes each of the following narrative descriptions (EFN: *Narrative.doc, .docx, .rtf*)
 - a. ☒ Detailed Project Description (5,000 character maximum)
 - ☒ Project Description including Goals/Results, Scope of Work, Location, Purpose, etc.
 - ☒ Project Summary
 - ☒ Environmental Setting
 - b. ☒ Workplan and Schedule (1,000 character maximum)
 - c. ☒ Restrictions, Technical/Environmental Documents and Agreements(1,000 character maximum)
 - d. ☒ Organizational Capacity(1,000 character maximum)
 - e. ☒ Cooperation and Community Support (1,000 character maximum)
 - f. ☒ Long Term Management and Sustainability (1,000 character maximum)
 - g. ☒ Performance Measures (1,000 character maximum)
6. Supplemental and Supporting documents
 - a. ☒ Detailed Budget Form (EFN: *Budget.xls, .xlsx*)
 - b. Restrictions, Technical/Environmental Documents and Agreements, as applicable
 - N/A** Restrictions / Agreements (EFN: *RestAgree.pdf*)
 - N/A** Regulatory Requirements / Permits (EFN: *RegPermit.pdf*)

N/A California Environmental Quality Act (CEQA) documentation (EFN: CEQA.pdf)

this planning project will not result in a direct or reasonably foreseeable indirect physical change in the environment, so is not subject to CEQA

N/A National Environmental Policy Act (NEPA) documentation (EFN: NEPA.pdf)
this planning project will produce both NEPA and CEQA documents.

c. Cooperation and Community Support

☒ Letters of Support (EFN: LOS.pdf)

d. Long-Term Management and Sustainability

N/A Long-Term Management Plan (EFN: LTMP.pdf)

e. Maps and Photos

☒ Project Location Map (EFN: LocMap.pdf)

N/A Parcel Map showing County Assessor's Parcel Number(s) (EFN: ParcelMap.pdf)
Federal land with no parcel number.

☒ Topographic Map (EFN: Topo.pdf)

☒ Photos of the Project Site (10 maximum) (EFN: Photo.jpg, .gif)

f. Additional submission requirements for Conservation Easement Acquisition applications only

N/A Acquisition Schedule (EFN: acqSched.doc, .docx, .rtf, .pdf)

N/A Willing Seller Letter (EFN: WillSell.pdf)

N/A Real Estate Appraisal (EFN: Appraisal.pdf)

N/A Conservation Easement Language (EFN: CE.pdf)

g. Additional submission requirements for Site Improvement / Restoration Project applications only

N/A Land Tenure Documents – attach only if documentation was not included with Pre-application (EFN: Tenure.pdf)

N/A Site Plan (EFN: SitePlan.pdf)

N/A Leases or Agreements (EFN: LeaseAgmnt.pdf)

I certify that the information contained in the Application, including required attachments, is accurate.

Lora Gomes
Signed (Authorized Representative)

1-12-12
Date

Lora Gomes Budget Analyst
Name and Title (print or type)

Create a Restoration Plan for Cahoon Meadow, Sequoia National Park

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Appendix B2

SIERRA NEVADA CONSERVANCY PROPOSITION 84 - PROJECT INFORMATION FORM

Rev. August 2011

PROJECT NAME Create a Restoration Plan for Cahoon Meadow, Sequoia National Park

APPLICANT NAME *(Legal name, address, and zip code)*

Sequoia and Kings Canyon National Parks
47050 Generals Highway
Three Rivers, CA 93271-9651

PERSON WITH FISCAL MANAGEMENT RESPONSIBILITY FOR GRANT CONTRACT/INVOICING

Name and title – type or print

Phone

Email Address

☐ Mr.

☒ Ms. Lora Gomes, Budget Analyst

559-565-3151

lora_gomes@nps.gov

COUNTY ADMINISTRATOR OR PLANNING DIRECTOR CONTACT INFORMATION *(At least one entry is required)*

Name: Mr. Alan Ishida, Supervisor, District 1 Tulare County
& Chairman of the Board of Supervisors

Phone Number: 559-636-5000

Email address: aishida@co.tulare.ca.us

Name:

Phone Number:

Email address:

NEAREST PUBLIC WATER AGENCY (OR AGENCIES) CONTACT INFORMATION *(At least one entry is required)*

Name: Regional Water Quality Control Board,
Central Valley Region

Phone Number: (559) 445-5116

Email address: info5@waterboards.ca.gov

Name: Kaweah Delta Water Conservation District

Phone Number: (559) 747-5601

Email address: kaweah@kdwcd.com

Please identify the appropriate project category below and provide the associated details *(Choose One)*

☐ Category One Site Improvement

☒ Category Two Pre-Project Activities

☐ Category One Conservation Easement Acquisition

☐ **Site Improvement/Conservation Easement Acquisition**

Project area: _____

Total Acres: _____

SNC Portion (if different): _____

Total Miles (i.e. river or stream bank): _____

Select one primary Site Improvement/Conservation Easement Acquisition deliverable

☐ Restoration

☐ Enhancement

☐ Resource Protection

☐ Infrastructure Development / Improvement

<div>SNC Portion (if different): _____</div> <div>For Conservation Easement Acquisitions Only</div> <div><input type="checkbox"/> Appraisal Included</div> <div><input type="checkbox"/> Will submit appraisal by _____</div>	<div><input type="checkbox"/> Conservation Easement</div>
<div><input checked="" type="checkbox"/> Pre-Project Activities</div>	<div>Select <u>one</u> primary Pre-Project deliverable</div> <div><div><input type="checkbox"/> Permit</div><div><input type="checkbox"/> CEQA/NEPA Compliance</div><div><input type="checkbox"/> Appraisal</div><div><input checked="" type="checkbox"/> Plan</div></div> <div><div><input type="checkbox"/> Condition Assessment</div><div><input type="checkbox"/> Biological Survey</div><div><input type="checkbox"/> Environmental Site Assessment</div></div>



United States Department of the Interior

NATIONAL PARK SERVICE
Sequoia and Kings Canyon National Parks
47050 Generals Highway
Three Rivers, California 93271-9651
(559) 565-3341



IN REPLY REFER TO:

N1617 (1.A.2)

January 17, 2012

Sierra Nevada Conservancy
11521 Blocker Drive, Suite 205
Auburn, CA 95603

To Whom It May Concern:

This is in reference to the following two grant applications from Sequoia and Kings Canyon National Parks:

1. Create a Restoration Plan for Cahoon Meadow, Sequoia National Park
2. Control of Velvet Grass in Kern Canyon, Sequoia National Park and Sequoia National Forest

The authorized fiscal representative for both grant applications is Lora Gomes, Budget Analyst. Ms. Gomes is authorized to sign all required grant documents including, but not limited to, the grant agreement, the application form, and payment requests.

The National Park Service has land tenure/ownership of the sites. The Cahoon Meadow project is contained within the designated boundary of Sequoia National Park. The Velvet Grass project is cooperative and includes United States Forest Service lands in Sequoia National Forest, though all work will be done by the National Park Service. A separate letter is included from Sequoia National Forest which authorizes this cooperative proposal for work on their lands.

Sincerely,

Karen F. Taylor-Goodrich
Superintendent

cc: Charisse Sydoriak, Chief of Resources Management and Science
Deb Pfenninger, Chief of Administration

Detailed Project Description

Summary

This project will produce a plan and NEPA/CEQA compliance to restore wetlands in the 17-acre Cahoon Meadow, which contains severe erosion gullies as a result of historic grazing. The meadow is located in designated wilderness, and alternatives will include both mechanized and non-mechanized treatments. In addition to providing a plan to improve water storage, wildlife habitat, and watershed health, this project will serve as a prototype for improving conditions of degraded wilderness meadows that have legacy impacts of past grazing.

Environmental Setting

Cahoon Meadow is a 17-acre wet meadow located at 7,350 feet elevation at the headwaters of Cahoon Creek, a tributary of the East Fork of the Kaweah River in Sequoia National Park. Held in private ownership until 1977, the meadow was historically dedicated to cattle grazing, now discontinued. Cahoon Meadow is within the designated John Krebs Wilderness.

Problem Statement

While in private ownership, Cahoon Meadow was severely impacted by cattle, which broke the protective sod and initiated a serious erosion problem. Upon acquisition by the National Park Service (NPS) in 1977, the grazing allotment was discontinued and the site left to naturalize. Since 1977, the channel has continued to show active head erosion, producing a massive gully that extends over 75% of the length of the meadow. In 1998, the gully averaged 30 feet wide and 9 feet deep for its entire 1,025-foot length, with maximum widths and depths of 65 feet and 15 feet respectively. This gully has lowered the water table and reduced the water-storage capacity of the meadow. The change in hydrologic function has led to a type conversion from wet meadow to dry upland in approximately 25% of the meadow area. Without intervention, this site will continue to degrade, and what was once a pristine mountain meadow will increasingly become a dry and unstable upland. Downstream Cahoon Creek, Horse Creek, the East Fork of the Kaweah, and ultimately Lake Kaweah will receive increased sediments, less late-season water, and more flooding. Thousands of forested acres surrounding Cahoon Meadow will be affected by the loss of wetland habitat.

Purpose, Goals, and Objectives

The purpose of this project is to create a plan to restore wetland hydrology, vegetation, and ecosystem function for 17 acres in Cahoon Meadow, with the following objectives:

1. Collect topographic information and create a base map for restoration plans.
2. Assess the success of past (1940s and 1950s) efforts to restore similar erosion gullies using hand crews, to evaluate whether hand-work (check dams) is likely to succeed in meeting restoration goals.
3. Formulate a range of feasible restoration goals and alternatives.
4. Create concept plans for the restoration alternatives, including plan views, cross sections, and draft details of restoration structures.
5. Write a NEPA/CEQA document.

Because Cahoon Meadow is in designated wilderness, designing feasible restoration treatments is challenging. We will consider mechanized treatments, but a key step is to revisit historic Soil and Moisture (SAM) Crew projects that restored gullied meadows in the 1940s through 1970s

using hand techniques, to assess whether such techniques could be viable options for Cahoon Meadow. This project will compile SAM Crew documents held in the park archives, identify sites where work was conducted to repair similar erosion gullies, and revisit these sites to evaluate the success of that work. The results of this assessment will be broadly relevant to meadow restoration in the Sierra Nevada, since many wilderness meadows still contain legacy incisions from past grazing. If hand techniques can succeed at restoring wetland vegetation, raising water tables, and increasing water-storage capacity and they can be broadly applied to wilderness meadows in the Sierra, the net water storage and watershed benefits could be substantial, and a resurgence of SAM-type crews could create many conservation jobs.

Results and Deliverables

A restored, healthy Cahoon Meadow will have many benefits for the East Fork Kaweah watershed, including flood attenuation, reduced stream erosion, sediment trapping, and longer dry season flows downstream. Meadow restoration will improve the health of the surrounding upland forest by providing forage and cover for wildlife, by sequestering carbon in organic soils, and by increasing diversity by providing habitat for wetland-dependent plants and animals.

This project will create 1.5 full-time job equivalents and will support local commercial stock packers. Future implementation will support local contractors or a large, multi-year conservation crew.

Deliverables:

1. A base map and wetland delineation of Cahoon Meadow.
2. A trip report of the 2013 site visit.
3. A report assessing the long-term (50-year) results of non-mechanized meadow restoration techniques and discussing their potential application in Cahoon Meadow and Sierra Nevada wilderness meadows.
4. A written plan and Environmental Assessment to implement on-the-ground restoration of wetlands at Cahoon Meadow, allowing the park to move directly to implementation of the selected alternative.

Workplan and Schedule

Work will be conducted by a team of National Park Service (NPS) and university hydrologists and ecologists over 3 years. In summer 2013, a site visit to Cahoon Meadow will be made by Joel Wagner (NPS wetland scientist), Mike Martin (NPS hydrologist), Athena Demetry (NPS restoration ecologist), Dr. David Cooper (Colorado State University wetland ecologist), and Evan Wolf (UC Davis PhD student). During this visit, the team will create a base map, conduct a wetland delineation, and discuss the range of restoration goals and alternatives. In 2013-2014, team members will revisit and evaluate past SAM Crew sites in the Roaring River area of Kings Canyon National Park, as well as create concept designs of restoration alternatives for Cahoon Meadow. In 2014-2015, an Environmental Assessment for the Cahoon Meadow Restoration Plan will be completed by National Park Service compliance staff.

This project is to be wholly funded by the SNC, with over 100 percent matching contributions from National Park Service base-funded staff.

DETAILED PROJECT DELIVERABLES	RESPONSIBLE	TIMELINE
Initiate project	NPS Demetry	10/01/2012
Complete cooperative agreement with Colorado State University, David Cooper PI	NPS Demetry	01/31/2013
Schedule 2013 site visit	NPS Demetry	03/31/2013
Six-month progress report to SNC	NPS Demetry	03/31/2013
Trip report of site visit, including preliminary identification and description of several restoration/stabilization goals & alternatives	CSU Cooper/Wolf	09/15/2013
Six-month progress report to SNC	NPS Demetry	09/30/2013
Wetland Delineation Report	CSU Cooper/Wolf	12/31/2013
Six-month progress report to SNC	NPS Demetry	03/31/2014
Begin scoping for EA	NPS Hendricks	04/01/2014
Search archives for relevant SAM Crew notes, maps, photos, and reports. Convert to digital format. Select meadows for revisits. Provide summary task report to park.	CSU Cooper/Wolf	05/31/2014
Draft Restoration Plan, including base map, several alternatives described with narratives, plan view of treatments, cross-sections of treatments, and conceptual details as necessary.	CSU Cooper/Wolf	05/31/2014
Begin writing EA	NPS Hendricks	06/01/2014
Complete site visits to relocate check dams & project sites and assess results of 1940s SAM Crew restoration treatments. Provide short trip report.	CSU Cooper/Wolf	09/15/2014
Six-month progress report to SNC	NPS Demetry	09/30/2014
Final report assessing success of SAM Crew restoration treatments (were they successful, in what meadows and why, and what was the level of effort required to obtain success). Provide recommendations.	CSU Cooper/Wolf	12/31/2014
Final Restoration Plan, incorporating results of SAM Crew site revisits	CSU Cooper/Wolf	02/28/2015
Six-month progress report to SNC	NPS Demetry	03/31/2015
Release EA for public comment	NPS Hendricks	06/01/2015
Six-month progress report to SNC	NPS Demetry	09/30/2015
Finding of No Significant Impact signed by Regional Director	NPS Hendricks	12/31/2015
Submit project completion report to SNC	NPS Demetry	01/31/2016

Restrictions, Technical/Environmental Documents and Agreements

This is a planning project; it is not a project that will result in a direct or reasonably foreseeable indirect physical change in the environment, so it is not subject to CEQA or NEPA and no other permits are required. This project will produce both CEQA and NEPA documents as well as the wetland delineation necessary to obtain Clean Water Act section 401 and 404 permits.

Organizational Capacity

This project is a collaborative effort between staff of Sequoia and Kings Canyon National Parks (SEKI), Colorado State University (CSU), and the NPS Water Resource Division. Since 2005, this team has worked to restore Halstead Meadow, which was crossed by a highway and had the most severe erosion in the park. Project leader Athena Demetry has 16 years of experience designing and implementing restoration projects in SEKI. Work by CSU will be done by a Cooperative Agreement with the NPS. The Principal Investigator, Dr. David Cooper, has 20-plus years of experience analyzing and restoring meadows in mountain regions of the western U.S. Evan Wolf is a UC Davis PhD student and CSU affiliate and has done extensive wetlands research and restoration in California since 2004. Joel Wagner is a wetland scientist with the

NPS Water Resources Division, where he serves as the NPS Wetlands Program Leader. NEPA and CEQA compliance will be led by SEKI Environmental Protection Specialist Nancy Hendricks who has 20 years of experience preparing environmental assessments and environmental impact statements on a variety of projects, including restoration projects.

Cooperation and Community Support

This cooperative project was developed by staff of Sequoia National Park, the NPS Water Resources Division, Colorado State University, and UC Davis. We consulted with Yosemite National Park and local agencies including Sequoia Riverlands Trust, the Southern Sierra Partnership, Sequoia National Forest, the Bureau of Land Management in Bakersfield, and Tulare Basin Wildlife Partners. We will consult widely with the public, local community, and concerned agencies and organizations during the NEPA scoping and public comment periods.

The following letters of support are attached:

Dr. David Cooper, Senior Research Scientist, Colorado State University

Linda Mazzu, Chief of Resources Management and Science, Yosemite National Park

Sopac McCarthy Mulholland, Sequoia Riverlands Trust

Rob Hansen, Tulare Basin Wildlife Partners

Joel Wagner, Wetlands Program Leader, NPS Water Resources Division

Long Term Management and Sustainability

This is not a land improvement project that requires a long-term management plan. However, long-term management will be a focus of planning. For example, restoration treatments implemented using mechanized equipment may more quickly restore the meadow and may not require maintenance past five years. Treatments implemented using hand crews may require many years (20 or more) of annual maintenance to be successful, but they are compliant with the Wilderness Act. This will be a critical issue requiring public input.

This project is supported by SEKI's long-term plans. The 2006 General Management Plan states that "wetlands that have been damaged or degraded by previous uses will be considered for restoration. . . original functions and values of each wetland will be restored to the greatest extent practicable." The 1999 Resource Management Plan prioritizes Cahoon and Halstead meadows as those most in need of restoration. The SEKI Management Team reviewed this proposal on 12/13/11 and gave it their support, including both mechanized and non-mechanized alternatives.

Performance Measures

The following SNC performance measures will be reported:

Required

Resources Leveraged for the Sierra Nevada

Number and Type of Jobs Created

Number and Diversity of People Reached

Project-Specific

Percent of Pre-project and Planning Efforts Resulting in Project Implementation

Number of Collaboratively Developed Plans and Assessments

Create a Restoration Plan for Cahoon Meadow, Sequoia National Park

The performance measure "Number and Value of New, Improved, or Preserved Economic Activities" is not relevant and will not be reported.

Appendix B3

SIERRA NEVADA CONSERVANCY PROPOSITION 84 - DETAILED BUDGET FORM

Project Name: Create Restoration Plan for Cahoon Meadow, Sequoia National Park

Applicant: Sequoia and Kings Canyon National Parks

SECTION ONE DIRECT COSTS	Year One	Year Two	Year Three	Year Four	Year Five	Total
<i>Project Management (SEKI)</i>	\$1,000.00	\$1,000.00	\$1,000.00			\$3,000.00
<i>Technical Services (CSU)</i>	\$7,000.00	\$24,000.00	\$5,000.00			\$36,000.00
<i>Environmental Assessment (SEKI)</i>		\$12,500.00	\$6,500.00			\$19,000.00
<i>Technical Expert Writing for EA (SEKI)</i>		\$3,720.00	\$3,830.00			\$7,550.00
<i>Site visit travel costs</i>	\$2,400.00					\$2,400.00
<i>Site visit stock/heli support</i>	\$3,000.00					\$3,000.00
DIRECT COSTS SUBTOTAL:	\$13,400.00	\$41,220.00	\$16,330.00	\$0.00	\$0.00	\$70,950.00

SECTION TWO INDIRECT COSTS	Year One	Year Two	Year Three	Year Four	Year Five	Total
<i>Performance Measure Reporting</i>	\$800.00	\$850.00	\$900.00			\$2,550.00
<i>EA printing, postage</i>		\$500.00	\$500.00			\$1,000.00
						\$0.00
INDIRECT COSTS SUBTOTAL:	\$800.00	\$1,350.00	\$1,400.00	\$0.00	\$0.00	\$3,550.00
PROJECT TOTAL:	\$14,200.00	\$42,570.00	\$17,730.00	\$0.00	\$0.00	\$74,500.00

SECTION THREE						Total
Administrative Costs (Costs may not to exceed 15% of total Project Cost) :						
<i>none</i>						\$0.00
						\$0.00
ADMINISTRATIVE TOTAL:	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SNC TOTAL GRANT REQUEST:	\$14,200.00	\$42,570.00	\$17,730.00	\$0.00	\$0.00	\$74,500.00

SECTION FOUR OTHER PROJECT CONTRIBUTIONS	Year One	Year Two	Year Three	Year Four	Year Five	Total
<i>NPS Water Resources Div. (Wagner)</i>	\$4,460.00	\$4,580.00	\$4,700.00			\$13,740.00
<i>NPS Water Resources Div. (Martin)</i>	\$4,190.00	\$4,300.00	\$4,410.00			\$12,900.00
<i>SEKI Project Management (Demetry)</i>	\$3,640.00	\$3,740.00	\$3,840.00			\$11,220.00
<i>SEKI Env. Assessment (Walter)</i>		\$12,500.00	\$6,500.00			\$19,000.00
<i>SEKI Env. Assessment (Hendricks)</i>		\$8,640.00	\$4,430.00			\$13,070.00
<i>SEKI Administrative Costs (Young)</i>	\$2,350.00	\$4,810.00	\$2,470.00			\$9,630.00
Total Other Contributions:	\$14,640.00	\$38,570.00	\$26,350.00	\$0.00	\$0.00	\$79,560.00

NOTE: The categories listed on this form are examples and may or may not be an expense related to the project. Rows may be added or deleted on the form as needed. Applicants should contact the SNC if questions arise.

* Operating Costs should be allocated to the percentage that is applicable to the grant based on your cost allocation methodology and cannot exceed 15% of your total project costs.



**Department of Forest and Rangeland Stewardship
Fort Collins, CO 80523-1472
(970) 491-5430**

18 January 2012

Sierra Nevada Conservancy
11521 Blocker Drive, Suite 205
Auburn, CA 95603

To whom it may concern,

It is with the greatest enthusiasm and confidence that we, Dr. David J. Cooper and Evan Wolf M.S., offer our full support to the National Park Service in their application for funding from the Sierra Nevada Conservancy. Athena Demetry, Restoration Ecologist of Sequoia National Park, is a leader in her field, and will be a superb project coordinator for the scoping, design and implementation of a chosen restoration program for Cahoon Meadow. Her attention to detail and dedication to restoring stable and functioning ecosystems through successfully completed projects is unparalleled. As part of the research, design, and implementation team for the cutting-edge restoration of Halstead Meadow in Sequoia National Park, we have worked together for over six years. In those years we have advanced the science of restoration, tested new techniques, and demonstrated that badly damaged meadows can be restored.

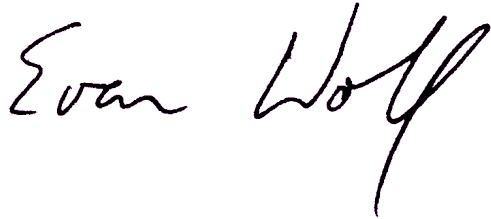
Just as Halstead Meadow can serve as an example of how long-term erosion damage can be reversed in front-country meadows of the Sierra Nevada, Cahoon Meadow poses a similar opportunity in the back-country. Back-country restoration poses different challenges and requires innovative techniques, but the same principles of restoring ecological functions applies. A large number of meadows and wetlands of the Sierra Nevada require restoration, and developing innovative approaches for restoration at Cahoon Meadow will provide confidence and guidance for a badly needed expanding scope of restoration projects. We have been involved in two large meadow restoration projects in the back-country, in Mt. San Jacinto State Park, CA and in Rocky Mountain National Park, CO, and are familiar with methods required to successfully operate a restoration in wilderness.

We are completely committed to our roles and tasks outlined in the project proposal for the restoration of Cahoon Meadow. This project should be a very high priority for improving our stewardship of public lands. Eroding meadows choke streams and reservoirs with sediment and fail to provide the soil building, carbon sequestration, and biological community support functions that natural meadows can. Funding the Cahoon Meadow planning project would provide an opportunity for this collaboration of scientists to develop new methods for restoration that could be used throughout the Sierra Nevada.

Thank you for your consideration of this project and we look forward to working closely with you,



David J. Cooper, Ph.D.
Senior Research Scientist, Professor
David.Cooper@colostate.edu



Evan Wolf, M.S.
Research Associate
Evan.Wolf@colostate.edu





United States Department of the Interior
NATIONAL PARK SERVICE
Water Resources Division
1201 Oakridge Drive, Suite 250
Fort Collins, Colorado 80525

January 17, 2012

L54(2380)
PWR/SEKI

Sierra Nevada Conservancy
11521 Blocker Drive, Suite 205
Auburn, CA 95603

To whom it may concern:

I am pleased to write this letter of support and to confirm my participation in the proposal to create a restoration plan for Cahoon Meadow, Sequoia National Park. This wilderness meadow was impacted by heavy livestock use prior to it becoming part of the park. It contains active erosion gullies that have lowered the water table, converted wetlands to dry upland habitat, and reduced the meadow's water storage capacity. Inaction will result in continued headward migration and deepening of the existing gullies, resulting in more and more wet meadow degradation and loss in the future.

The proposed work is significant because a restored and healthy Cahoon Meadow would have many benefits for this watershed. Healthy wet meadows sequester carbon in organic soils, attenuate floods, reduce stream erosion, trap sediment, and help maintain longer dry season flows downstream. They also contribute to biodiversity by providing habitat for wetland-dependent plants and animals, and provide forage and cover for wildlife species that use wet meadows seasonally.

As the National Park Service's program leader responsible for promoting preservation and restoration of wetlands across the Service, I strongly support this proposal and encourage the Sierra Nevada Conservancy to select it for funding. In addition to its important local ecological benefits, this project would serve as a prototype for how to improve the condition of degraded wilderness meadows elsewhere in the park and throughout the region. If it is funded, I am committed to serving as a member of the project team during its 3-year duration using my existing funding (no cost to the project). This team has worked together very successfully on the Halstead Meadow restoration in Sequoia National Park, and I am confident that this success will carry over to the proposed project at Cahoon Meadow.

Please contact me if you have any questions or would like to discuss the proposal.

Sincerely,

A handwritten signature in black ink that reads "Joel Wagner". The signature is written in a cursive style with a large, stylized "J" and "W".

Joel Wagner, Wetlands Program Leader
National Park Service
Water Resources Division
P.O. Box 25287
Denver, CO 80225
Phone: (303) 969-2955
Fax: (303) 987-6792
e-mail: joel_wagner@nps.gov

CC:

SEKI – Demetry, Sydoriak
WRD – Smillie, Rosenlieb



TULARE BASIN WILDLIFE PARTNERS
Creating Opportunities for Nature and People

January 20, 2012

Sierra Nevada Conservancy
11521 Blocker Drive, Suite 205
Auburn, CA 95603

To Whom It May Concern:

On behalf of the Tulare Basin Wildlife Partners (TBWP), I am pleased to write in support of the proposed creation by Sequoia National Park of a restoration plan for Cahoon Meadow. A healthy, naturally functioning Cahoon Meadow will benefit the entire Kaweah watershed, provide hydrologic benefits downstream, improve habitat for wetland-dependent wildlife species, and serve as an important example for restoration of other Sierra meadows damaged by over-grazing.

Meadow restoration in the Kaweah River upper watershed is a strong priority for the TBWP as a result of our leadership role in the Tulare Basin Watershed Initiative and participation as a Planning Committee member of the Southern Sierra Integrated Regional Water Management Plan (SSIRWMP). The TBWP is currently providing funding for the preparation by Conservation Strategy Group of a Round 2 re-application by the SSIRWMP to the CA Department of Water Resources for a Planning Grant. We believe this effort will succeed and expect that it will be the springboard for significant new collaborative efforts to fund and implement meadow, riparian, and wetland restoration in the upper watershed portions of the Tulare Basin.

Creation of a restoration plan for Cahoon Meadow, and its subsequent restoration, will be important steps toward improving the health of the upper watershed and will help provide for adaptive climate change landscape "infrastructure."

We hope the Sierra Nevada Conservancy will give positive consideration to the Sequoia National Park pre-application funding request for Cahoon Meadow.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert B. Hansen", written in a cursive style.

Robert B. Hansen
President

Contact: Carole K. Combs, Secretary of the Board, Tulare Basin Wildlife Partners, P.O. Box 1180, Three Rivers, CA 93271, phone 559/799-7204, fax 559/561-1921, ccombs@thegrid.net, www.tularebasinwildlifepartners.org

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Yosemite National Park
P.O. Box 577
Yosemite National Park, California 95389

IN REPLY REFER TO:
(YOSE- N2219)

OFFICIAL CORRESPONDENCE VIA ELECTRONIC MAIL
NO HARD COPY TO FOLLOW

January 12, 2012

Sierra Nevada Conservancy
11521 Blocker Drive, Suite 205
Auburn, CA 95603

To whom it may concern:

I am writing in support of the proposed restoration plan for Cahoon Meadow, Sequoia National Park. This meadow is in need of restoration actions due to the severe gully formation which occurred from cattle grazing when it was privately owned prior to 1977. This deep gully has lowered the water table, caused conversion of wetlands to dry upland vegetation, and reduced the water-storage capacity of the meadow.

Yosemite National Park also struggles with habitat that has been impacted from past heavy grazing in montane meadows. We are supportive of this project because 1) we will be able to apply the restoration techniques and knowledge gained from this project to meadows with similar issues within Yosemite. 2) we are concerned about the integrity of montane meadows within the Sierra Nevada region as they are vital habitat for many wildlife species that move between political boundaries and 3) these Sierra meadows also play a key role in providing hydrological benefits downstream with the slower release of water and maintenance of flows longer into the summer and fall seasons. However, a degraded meadow will not be able to provide these functions.

I and my staff strongly support this application and encourage the Sierra Nevada Conservancy to give favorable consideration to this request to fund a restoration plan for Cahoon Meadow.

Sincerely,



Linda Mazzu

Chief, Resource Management and Science
Yosemite National Park



January 17, 2012

Sierra Nevada Conservancy
11521 Blocker Drive, Suite 205
Auburn, CA 95603

To whom it may concern:

I am writing on behalf of Sequoia Riverlands Trust, and as a founding member of both the Southern Sierra Partnership and the Southern Sierra Conservation Cooperative, to support the National Park Service's Cahoon Meadow restoration planning project.

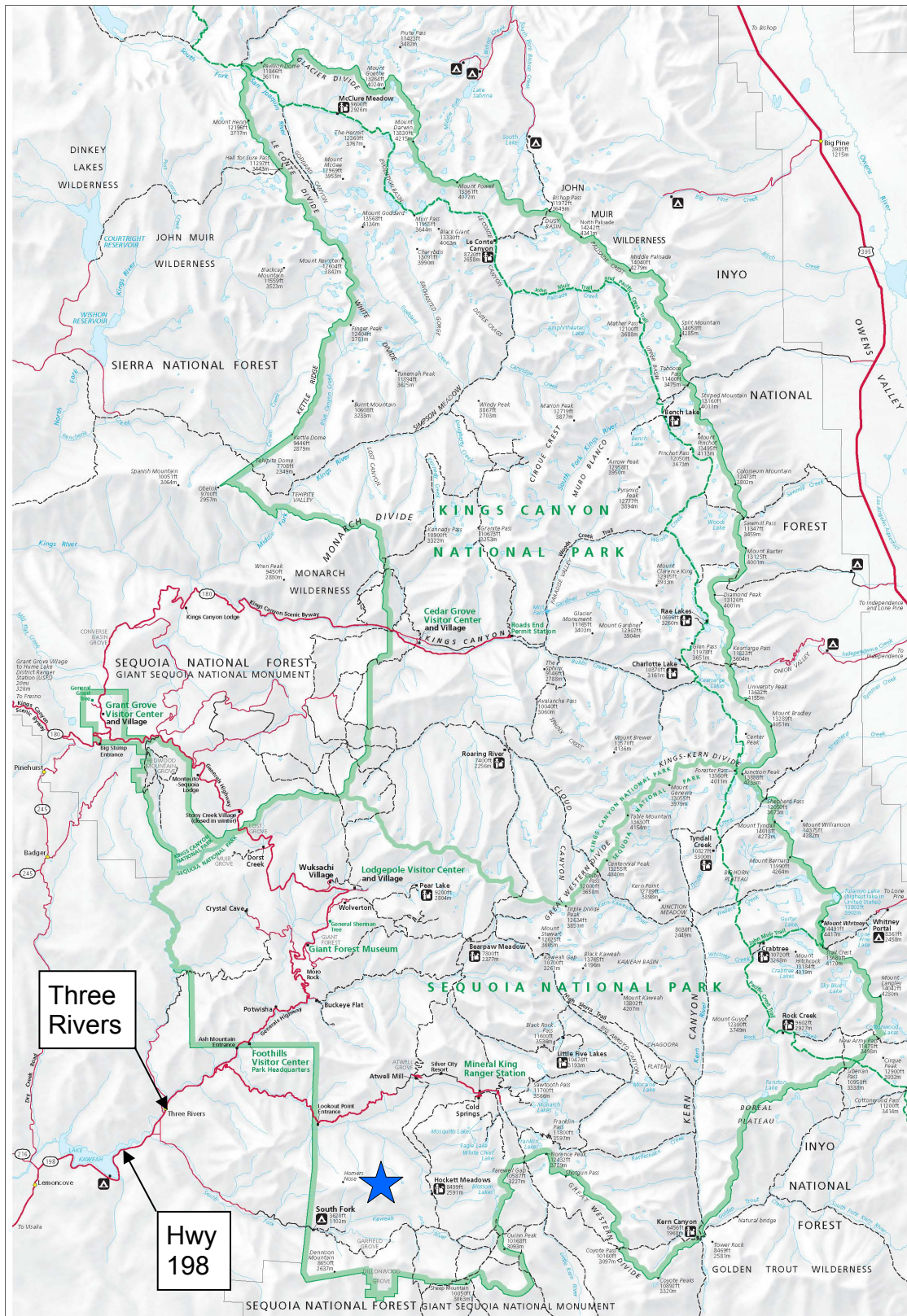
Riparian corridor protection and restoration are cited as top priority conservation strategies in the Southern Sierra Partnership's "Framework for Cooperative Conservation and Climate Adaptation in the Southern Sierra Nevada and Tehachapi Mountains." Healthy mountain meadows provide essential riparian habitat to a wide variety of plants and animals, and play an important role in natural water storage and flow regulation in watersheds serving the irrigation needs of the multi-billion dollar San Joaquin Valley agricultural economy. By building on lessons learned from previous Sequoia National Park meadow restoration work, the proposed Cahoon Meadow restoration planning project will enable the Park to enhance habitat and hydrologic functions of numerous wilderness meadows in the future.

I urge you to approve funding for the proposed Cahoon Meadow restoration planning project.

Sincerely,

A handwritten signature in black ink, reading "Sopac McCarthy Mulholland". The signature is written in a cursive style.

Sopac McCarthy Mulholland
Executive Director



Project Location Map: location of Cahoon Meadow (blue star) in relation to Hwy 198, Three Rivers, and the boundary of Sequoia and Kings Canyon National Parks.

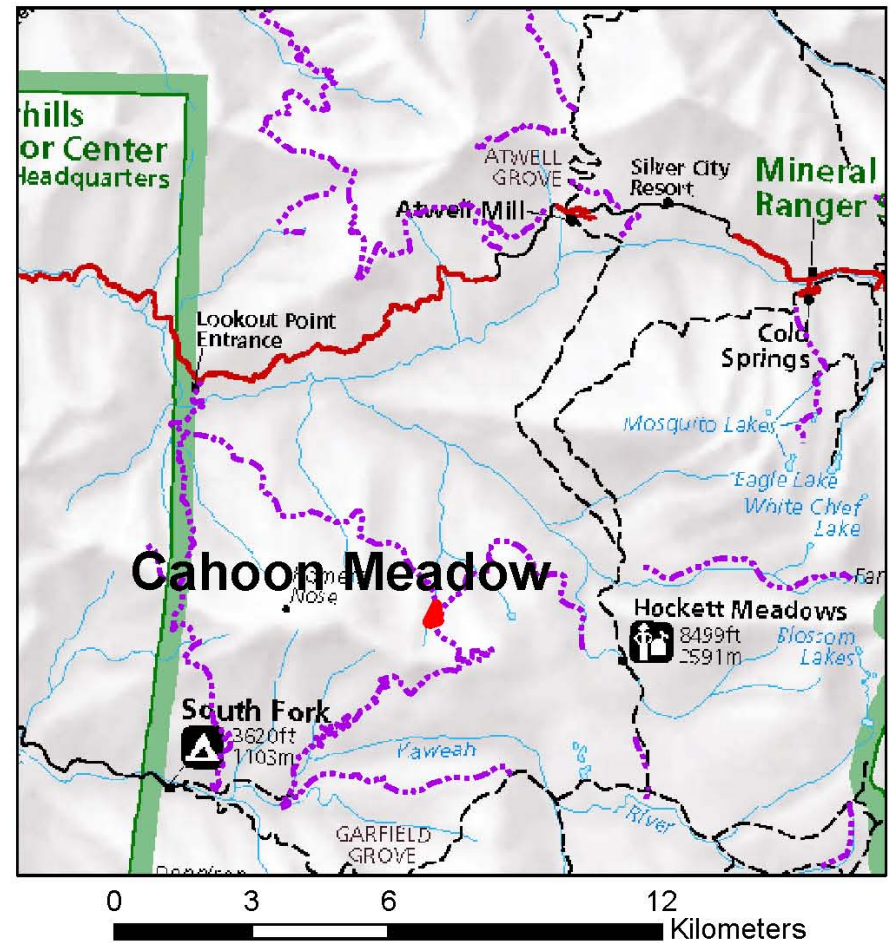
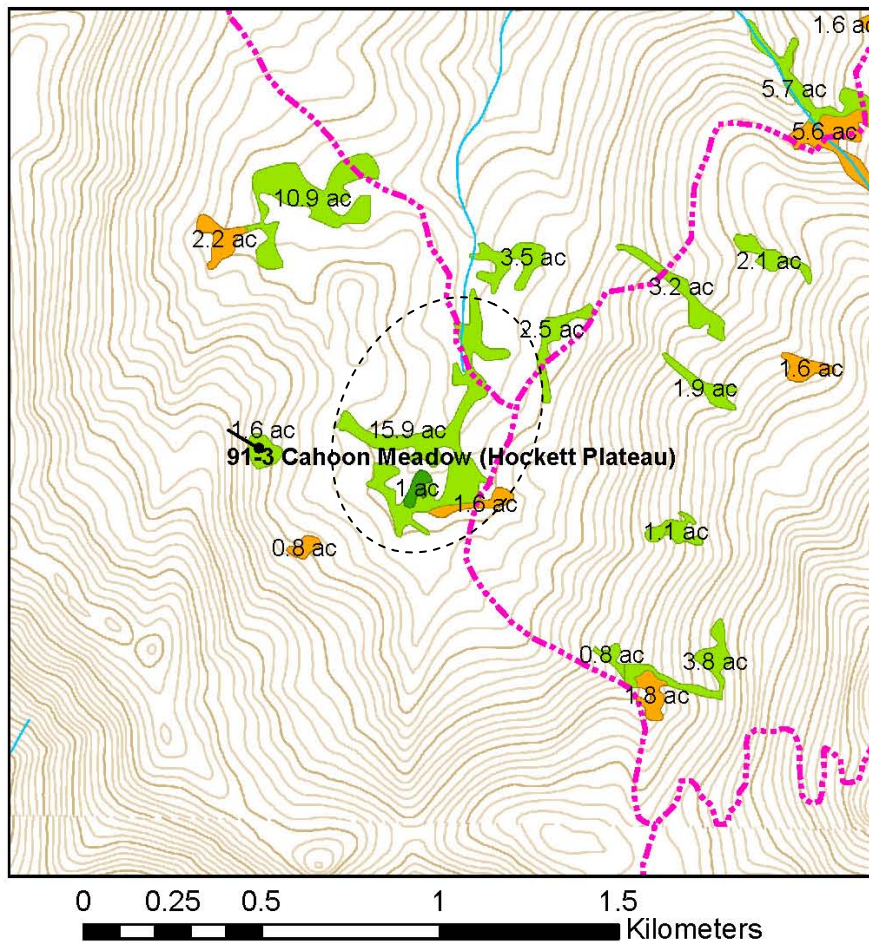
Parcel Map- N/A

Federal Land with no parcel number



Topographic Map: cropped USGS 1:24000 topographic map (Silver City quad) of Cahoona Meadow and vicinity.

91-3 Cahoon Meadow (Hockett Plateau)



Legend

SEKI Meadow Vegetation

6500, Shrub Willow Meadow Setting mapping unit

7120, Shorthair Sedge Herbaceous Alliance

8000, Intermittently to Temporarily Flooded Meadow

9000, Seasonally to Permanently Flooded Meadow

Trails - Maintained

Trails - Unmaintained

Lakes

Rivers & Streams- South Half of Sierra



Map by NPS (EF) 10/17/2011



Aerial image of Cahoon Meadow from Google Maps. Drainage runs south to north.



Photo (scanned slide) of gully location, from helicopter, looking downstream (south to north). Gully is at left edge of meadow. Photo: Jason DeNeau, 1998.



Water pouring over gully headcut. Note person (nearly 6' tall) holding rod. Photo: Jason DeNeau, 1998.



Another view of erosion gully, looking upmeadow. Photo: Jason DeNeau, 1998.



Face of eroded gully in Cahoon Meadow. Photo: Jason DeNeau, 1998.



Dried meadow created by drop in water table. Gully is to left. Photo: Jennifer Jones, 2009.



Undisturbed wetland in the upper extents of Cahoon Meadow. Photo: Jennifer Jones, 2009



Log check dam constructed by Soil and Moisture Crew in a Sugarloaf Meadow erosion gully in 1949. Photo: SEKI archives.



Remnant of log check dam in former Sugarloaf Meadow erosion gully in 2008, showing gully repair and wetland vegetation recovery. Photo: Erik Frenzel.